Approved for use through 06/30/2008. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Sub	stitute for form 1449/PTO	Complete if Known			
		Application Number	10/813,747		
IA	FORMATION DISCLOSURE	Filing Date	March 29, 2004		
		First Named Inventor	Simmons et al.		
S	TATEMENT BY APPLICANT	Art Unit	1644		
	(Use as many sheets as necessary)	Examiner Name	M. Belyavskyi		
Sheet	1 of 5	Attorney Docket Number	75990-B /JPW/BJA/LM		

			U. S. PATEN	DOCUMENTS	* ***	
Examiner Initials*	Cite No.1	Document Number Number-Kind Code ^{2 (# known)}	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevan Figures Appear	
	1	^{US-} 5,405,772	04-11-95	Ponting et al.		
	2	^{US-} 2007/0274958	11-29-07	Shi et al.		
		US-				
		US-	1			
		US-				
		US-				
		US-				
		US-				
		US-				
		US-				
		US-				
		US-				
		US-		——————————————————————————————————————		
		US-				
•		US-				
		US-	 		 	
		US-				
		US-			 	
		US-				

Country Code ³ -Number ⁴ -Kind Code ⁵ (if known) WO 00/006701	02-10-00	Applicant of Cited Document Mickle et al.	Where Relevant Passages Or Relevant Figures Appear	Τ°
WO 00/006701	02-10-00	Mickle et al.		-
			1	
WO 02/007679	01-31-02	Shi et al.	1.40	
				L
	WO 02/007679	WO 02/007679 01-31-02	WO 02/007679 01-31-02 Shi et al.	WO 02/007679 01-31-02 Shi et al.

Examiner	Date	
Signature	Conside	ored
- · · · · · · · · · · · · · · · · · · ·	Consider	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 'Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁸Applicant is to place a check mark here if English language Translation is attached.

Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Applicant: Simmons et al. Serial No.: 10/813,747 Filed: March 29, 2004

Exhibit A

PTO/SB/08b (01-08)
Approved for use through 06/30/2008. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to reer

Substitute for form 144		-		Complete if Known	/LM
			Application Number	10/813,747	
INFORMAT	Application Number 10/813,747 RMATION DISCLOSURE Filling Date March 29, 2004 EMENT BY APPLICANT First Named Inventor Simmons et al. Art Unit 1644 Examiner Name M. Belyavskyi				
STATEMEN	NT BY A	PPLICANT	First Named Inventor	Simmons et al.	
/ilea as m	anv choote se n	accessory)	Art Unit	1644	
(030 23		occasary,	Examiner Name	M. Belyavskyi	
Sheet 2	of	5	Attorney Docket Number	75990-B/JPW/BJA/LM	

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	5	Barry, M. (2003) "Biology and Clinical ApplicationsStem Cells." Birth Defect Research (Part C) 69:250-256.	
	6	Cassiede, P. et al. (1996) "Osteochondrogenic Potential of Marrow Mesenchymal Progenitor Cells Exposed to" Journal of Bone and Mineral Research Vol. 11(9):1264-1273.	
	7	Chopp, M. and Li, Y. (2002) "Treatment of Neural Injury with Marrow Stromal Cells." The Lancet Neurology 1:92-100.	
	8	Dennis JE, et al. (2002), "The STRO-1+ Marrow Cell Population is Multipotential," Cells Tissues Organs, 170:73-82.	
	9	Finney, M.R. et al. (2006), "Direct Comparison of Umbilical Cord Blood versus Bone Marrow-Derived Endothelial Precursor," Biol. Blood and Marrow Transplant. 12:585-593	
	10	Fujii, S. et al. (2008), "Investigating a Clonal Human Periodontal Ligament Progenitor/Stem Cell Line in Vitro and In Vivo," J. Cell. Physiol. 215:743-749	
	11	Greenberger, J. and Keating, A. (1996) "The Hematopoietic Microenvironment." Keystone Symposium, Taos, New Mexico 14:366-367.	
	12	Gronthos et al. (1996) "The Biology and and Application of Human Bone Marrow Stromal Cell Precursors." Journal of Hematotherapy 5(1): 15-23 (Abstract).	
	13	Hoerstrup SP et al. (2002), "Tissue Engineering of Functional Trileaflet Heart Valves from Human Marrow Stromal Cells." Circulation 106(Suppl):I-143-150.	
	14	Kang Yong Jung et al. (2004) "Involvement of PI-3-kinase, JNK, PKC, and PKA in the PDGF-inducedmesenchymal stem cells." Vol. 18(8) C253.	

Examiner	Date	
Signature	Considered	

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:

Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/08b (01-08)
Approved for use through 06/30/2008. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
2 a collection of informatics and the commerce of the comm

Substitute for form 1449/PTO		of information unless it contains a valid OMB control number. Complete if Known
	Application Number	10/813,747
INFORMATION DISCLOSURE	Filing Date	March 29, 2004
STATEMENT BY APPLICANT	First Named Inventor	Simmons et al.
(Use as many sheets as necessary)	Art Unit	1644
	Examiner Name	M. Belyavskyi
Sheet 3 of 5	Attorney Docket Number	75990-B/JPW/BJA/LM

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	15	Kassem, M. (2004) "Mesenchymal Stem Cells: Biological Characteristics and Potential Clinical Applications." Cloning Stem Cells 6:369-374.	
	16	Le Blanc, K. and Ringden, O. (2005) "Immunobiology of Human Mesenchymal Stem Cells and Future Use in Hematopoietic" Biology of Blood and Marrow Transplantation 11:321-33	
	17	Murray et al. (1996) "Fetal Bone Marrow CD34+CD41+ Cells are Enriched for Multipotent Hematopoietic Progenitors" Exp. Hematol. 24:236-245.	
	18	Pan, Beiqing et al. (2004) "The nitrogen-containing bisphosphonate, zaledronic acid, increases mineralisation of human bone-derived cells in vitro." Bone 34:112-123.	
	19	Summer, R. and Fine, A. (2008) "Mesenchymal Progenitor Cell Research: Limitations and Recommendations," Proc. Am. Thorac. Soc. 5:707-710.	
	20	Yang XV, et al. (2006), "Evaluation of Human Bone Marrow Stromal Cell Growth on Biodegradable," Biochemical and Biophysical Research Communications 342:1098-1107	
	21	International Preliminary Report on PatentabilityInternational Bureau of WIPO on October 1, 2005 in connection with International Application No. PCT/AU2004/000416	
	22	Extended European Search Report issued December 27, 2007 in connection with European Application No. 05787106.3.	
	23	Supplementary European Search Report issued January 2, 2008 in connection with European Application No. 05754008.0.	
	24	November 13, 2007 Office Action issued in connection with U.S. Serial No. 11/169,875.	

-		
Examiner	Date	
Signature	Considered	
	1	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark.Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:

Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/08b (01-08)
Approved for use through 06/30/2008. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Substitut	Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT		Complete if Known			
				Application Number	10/813,747	
INF		CLOSURE	Filing Date	March 29, 2004		
STA	TEMENT B	Y A	PPLICANT	First Named Inventor	Simmons et al.	
	(Usa as many sha	ote se r	locassan/)	Art Unit	1644	
	(550 25 many 510	0.3 43 7		Examiner Name	M. Belyavskyi	
Sheet	4 of		5	Attorney Docket Number	75990-B/JPW/BJA/LM	

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	25	January 8, 2008 Office Action issued in connection with U.S. Serial No. 11/326,736	
	26	January 8, 2008 Office Action issued in connection with U.S. Serial No. 10/551,162	
	27	January 10, 2008 Final Office Action issued in connection with U.S. Serial No. 10/955,709	
	28	April 4, 2008 Restriction Requirement issued in connection with U.S. Serial No. 10/551,326.	
	29	September 12, 2008 Office Action issued in connection with U.S. Serial No. 10/551,162.	
	30	October 16, 2008 Office Action issued in connection with U.S. Serial No. 10/955,709.	
	31	November 13, 2008 Office Action issued in connection with U.S. Serial No. 10/551,326.	
	32	November 17, 2008 Office Action issued in connection with U.S. Serial No. 11/326,736.	
	33	November 26, 2008 Office Action issued in connection with U.S. Serial No. 11/169,875.	
	34	June 22, 2009 Final Office Action issued in connection with U.S. Serial No. 10/551,162	

Examiner	Date	
Signature	Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/08b (01-08)

Approved for use through 06/30/2008. OMB 0651-0031

plitute for form 1440/DTO	Complete if Known	
Under the Paperwork Reduction Act of 1995, no persons ar	e required to respond to a collection of information unless it contains a valid OMB control of	rumber.
	U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMP	

Substitute for form 1449/PTO		Complete if Known			
f				Application Number	10/813,747
INFORMATION DISCLOSURE				Filing Date	March 29, 2004
STATEMENT BY APPLICANT		First Named Inventor	Simmons et al.		
(Use as many sheets as necessary)			200000000	Art Unit	1644
(Use as many sneets as necessary)		Examiner Name	M. Belyavskyi		
Sheet	5	of	5	Attorney Docket Number	75990-B/JPW/BJA/LM

Examiner	Cite	NON PATENT LITERATURE DOCUMENTS Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of	•
Initials*	No.1	the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
	35	June 23, 2009 Final Office Action issued in connection with U.S. Serial No. 11/169,875	
	36	July 16, 2009 Final Office Action issued in connection with U.S. Serial No. 10/955,709	
		·	
,			

Examiner	Date	
Signature	 Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:

Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.